SnapPlus 14.0

Solutions to NM planning problems

August 22, 2014

SnapPlus 14.0 Beta

- Download from snapplus.wisc.edu
- Beta update: Sept 3rd
- Final release target date: Sept 12th

Last XP Release

Allocate all my manure!

Move data between databases?

My recs are too high…

Can't get rid of those #$!? CAFO w restrictions?

What's behind the recs???

Custom fertilizer blend for my farm.

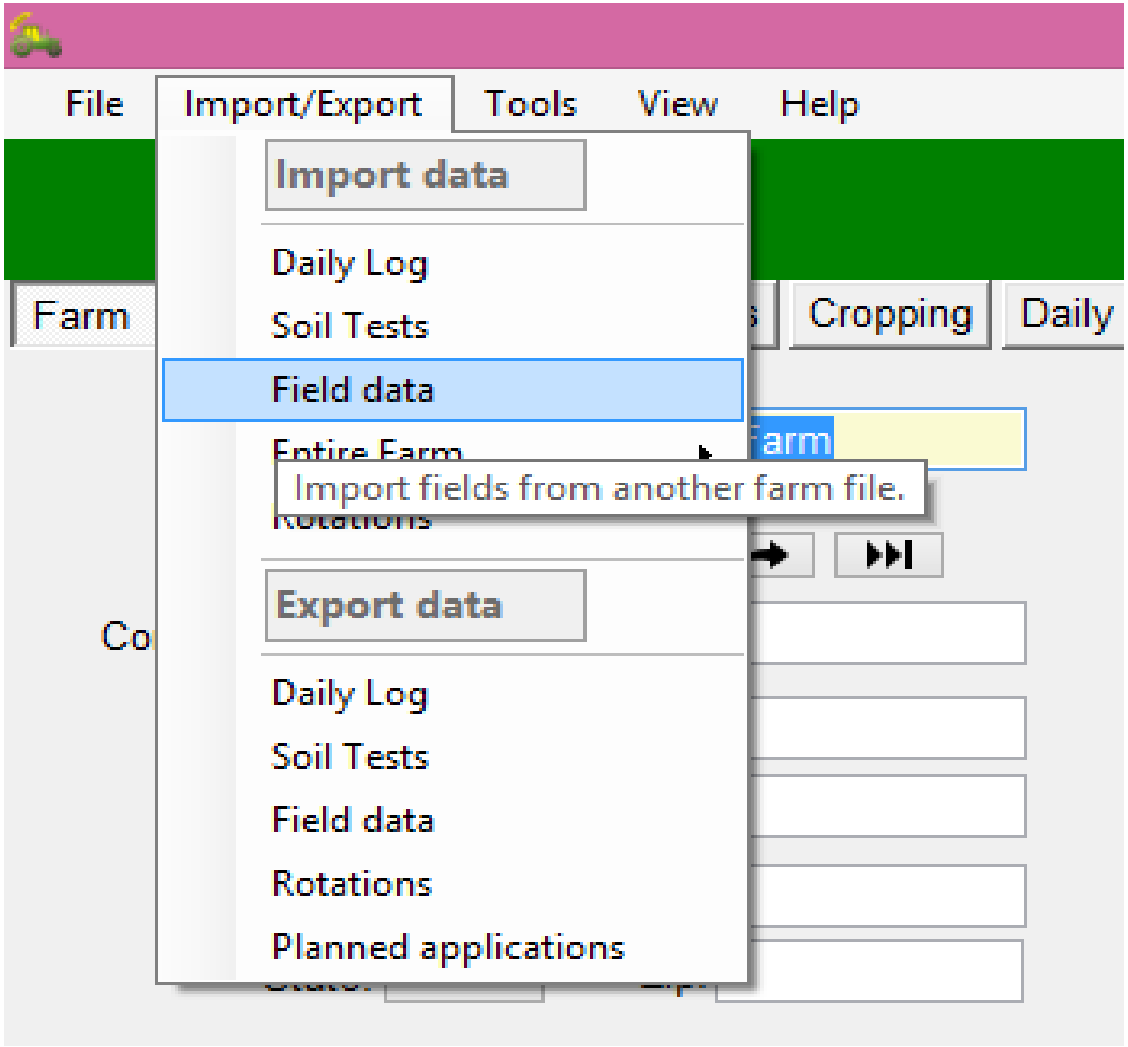
STIRed not shaken!!!

Solving some NM Problems!!!

Thing to know about 14.0

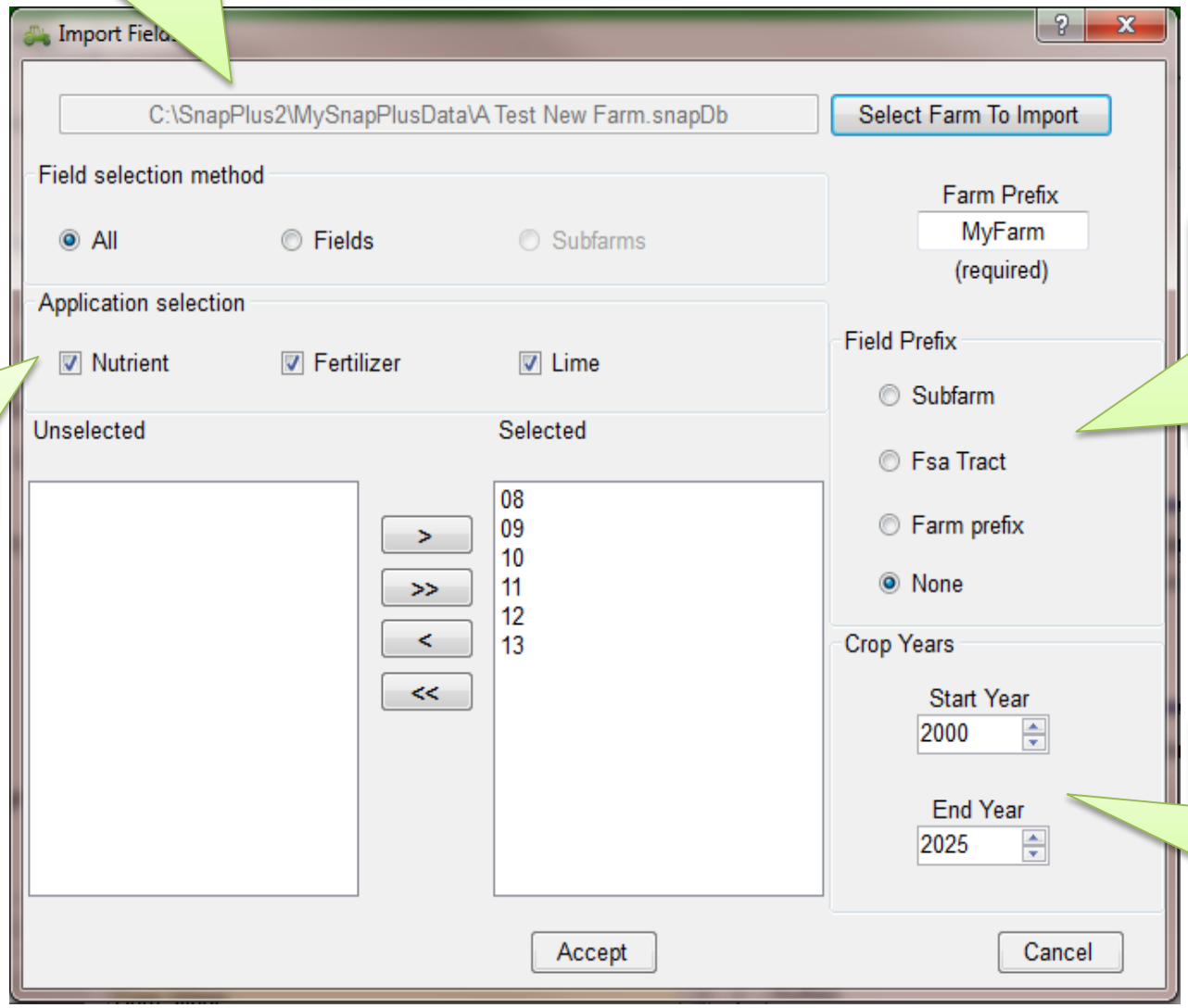
- 14.0 means 2014 initial release
- 14.0 Beta can run side-by-side with 2.0
- 2.0 farm databases auto convert to/from 14.0
- Last Windows XP release
- New tools for moving data between farms
- New tools for allocating nutrients based on needs
- CAFO updates: W soil, CAFO Winter Spreading
- Recs too high: Explain, GDD Override, Neg Recs
- Soils and STIR data on snapplus.wisc.edu

Import/Export farm data



Import

Includes fields, soil tests, cropping data

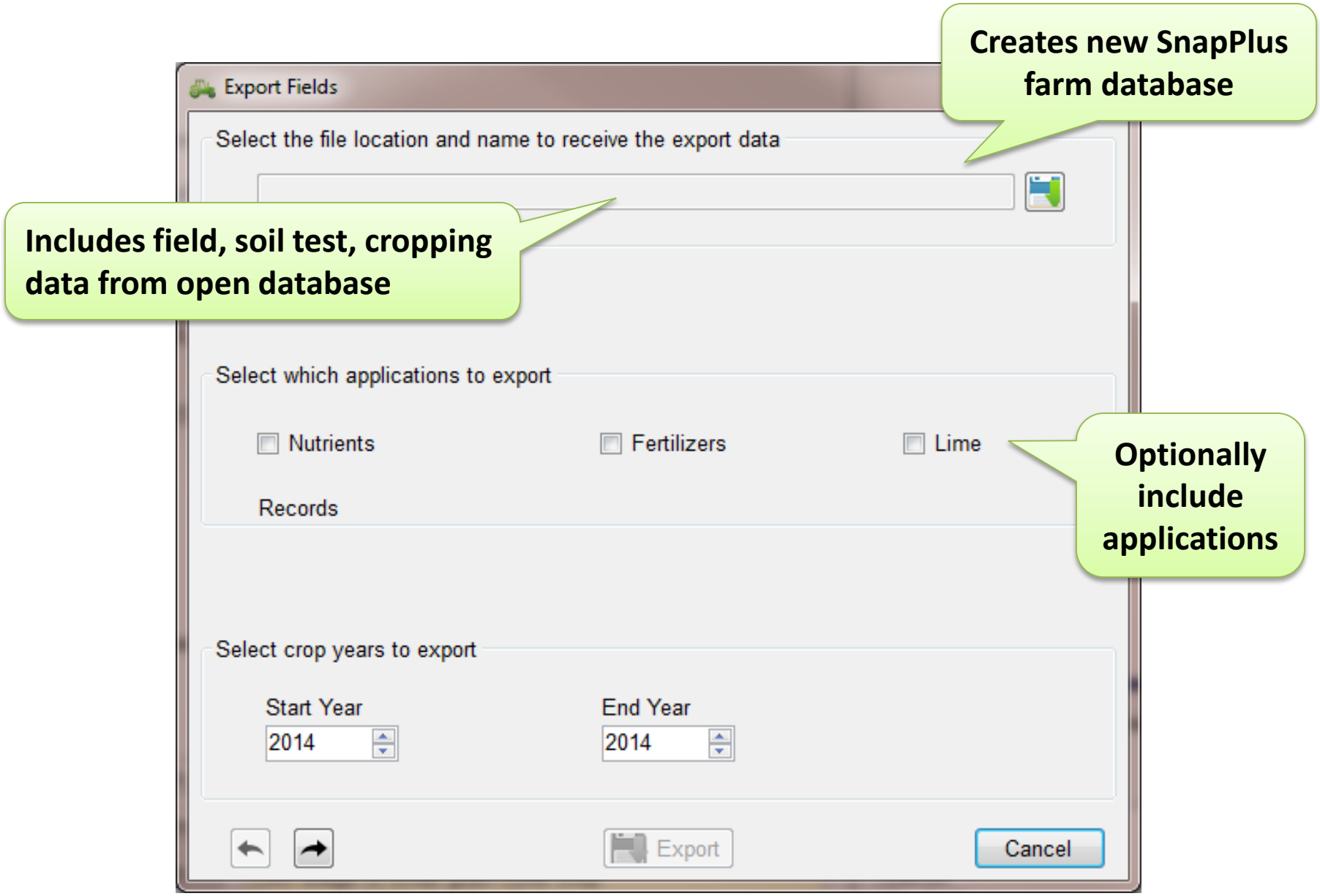


Optionally include applications

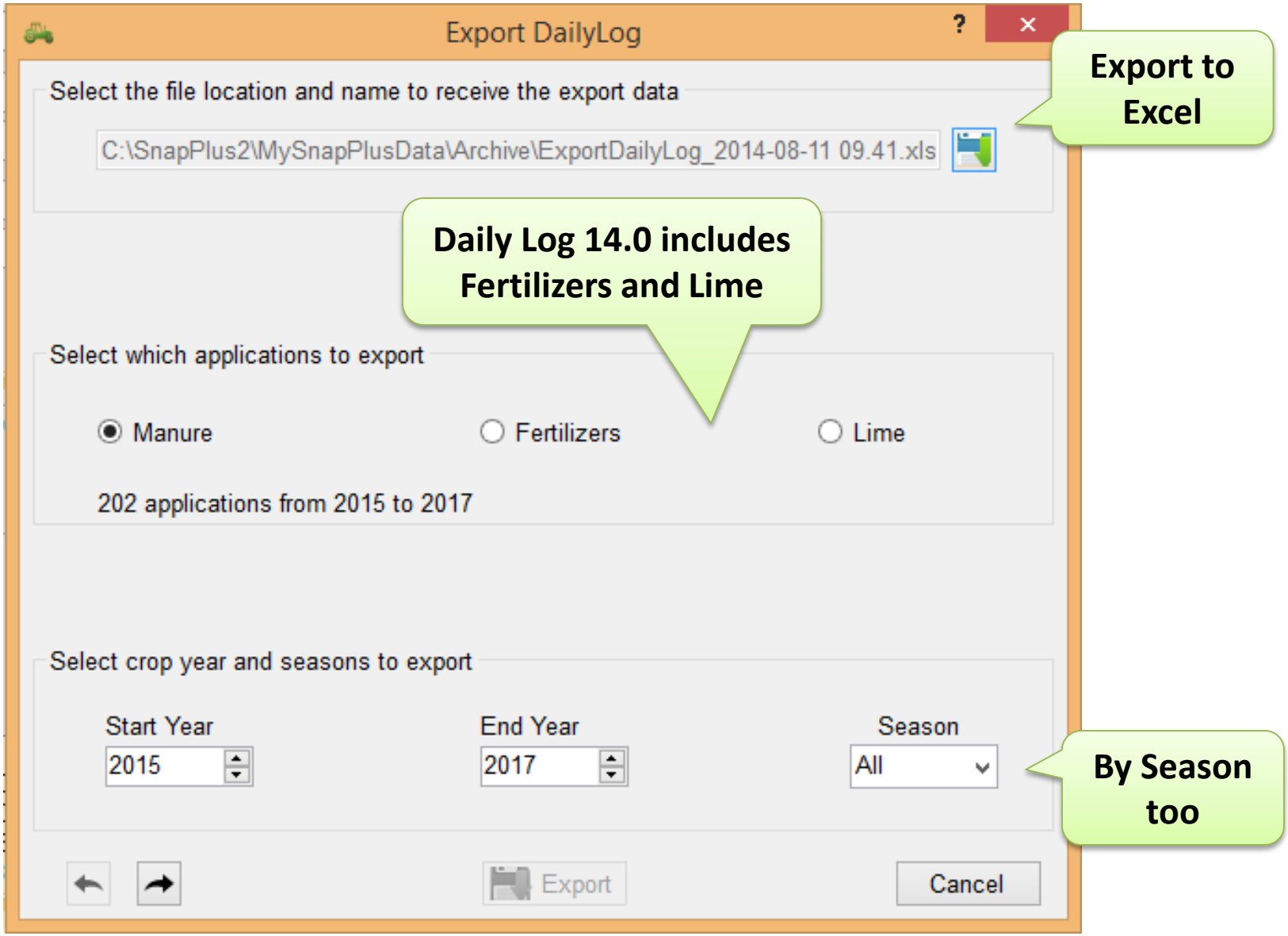
Prefix added to field names

Set crop years to import

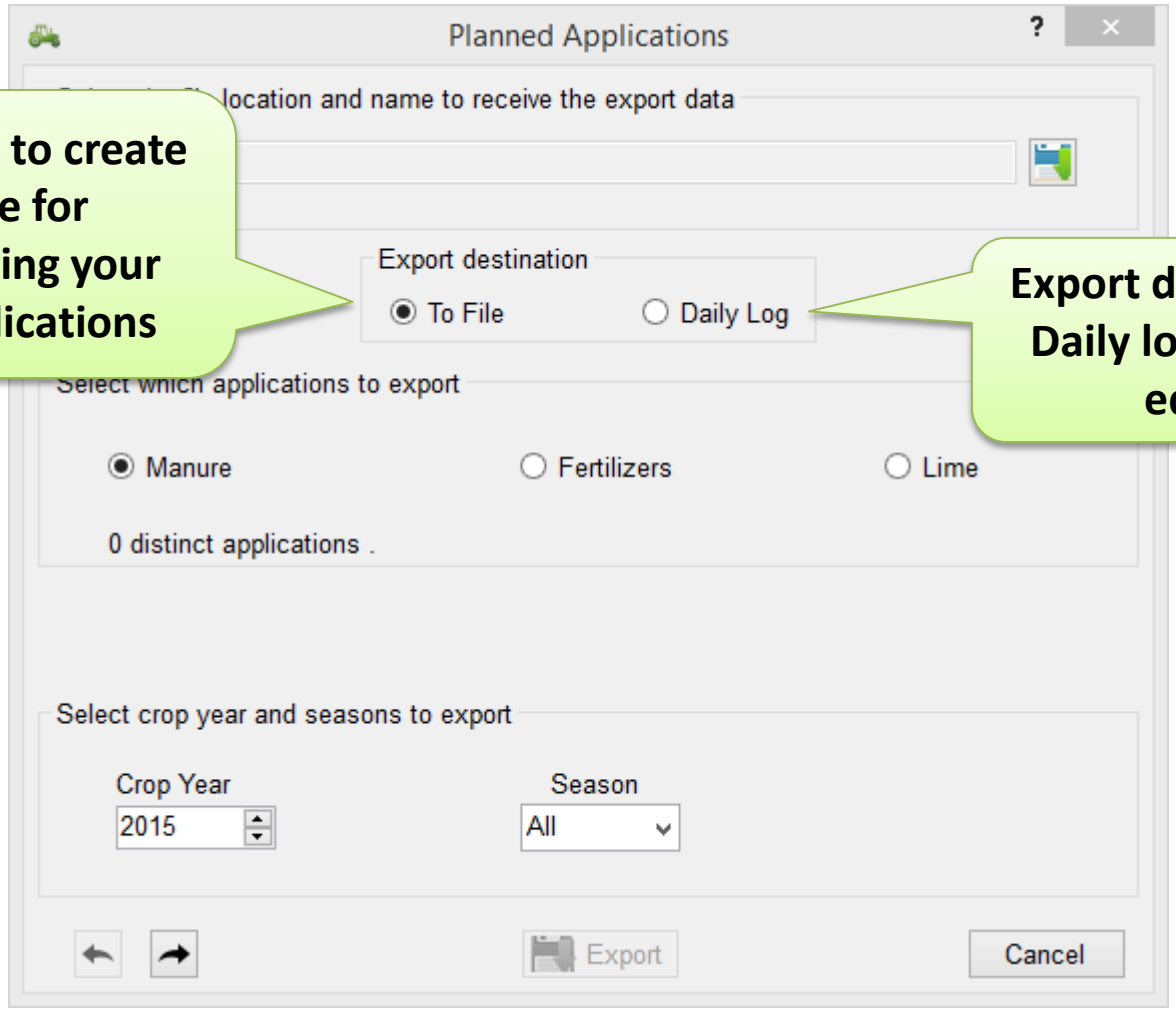
Export


Creates new SnapPlus farm database
Includes field, soil test, cropping data from open database
Optionally include applications
Export Fields
Select the file location and name to receive the export data
Select which applications to export
Nutrients
Fertilizers
Lime
Records
Select crop years to export
Start Year
2014
End Year
2014
Export
Cancel

Export Daily Log



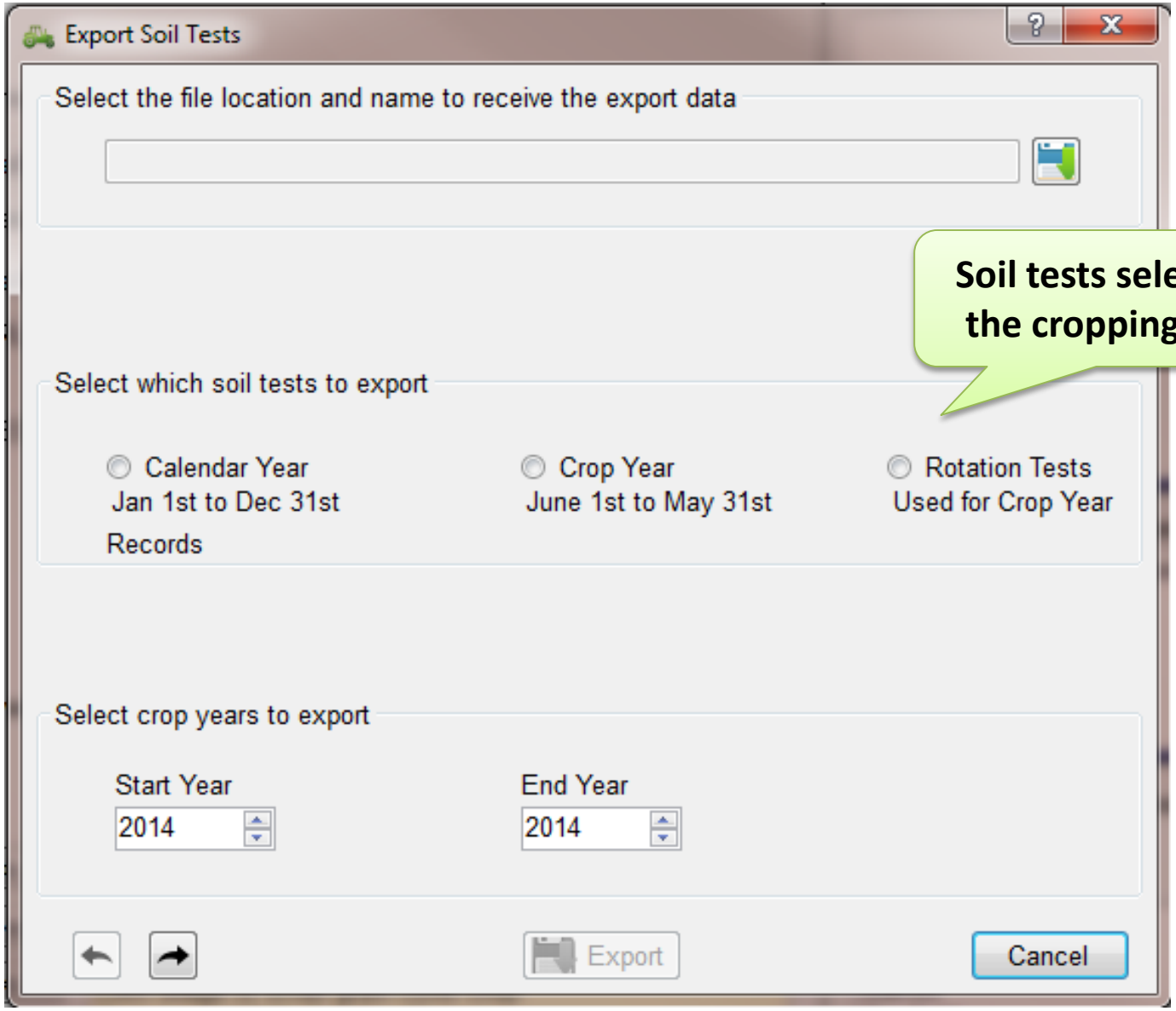
Export Planned Applications



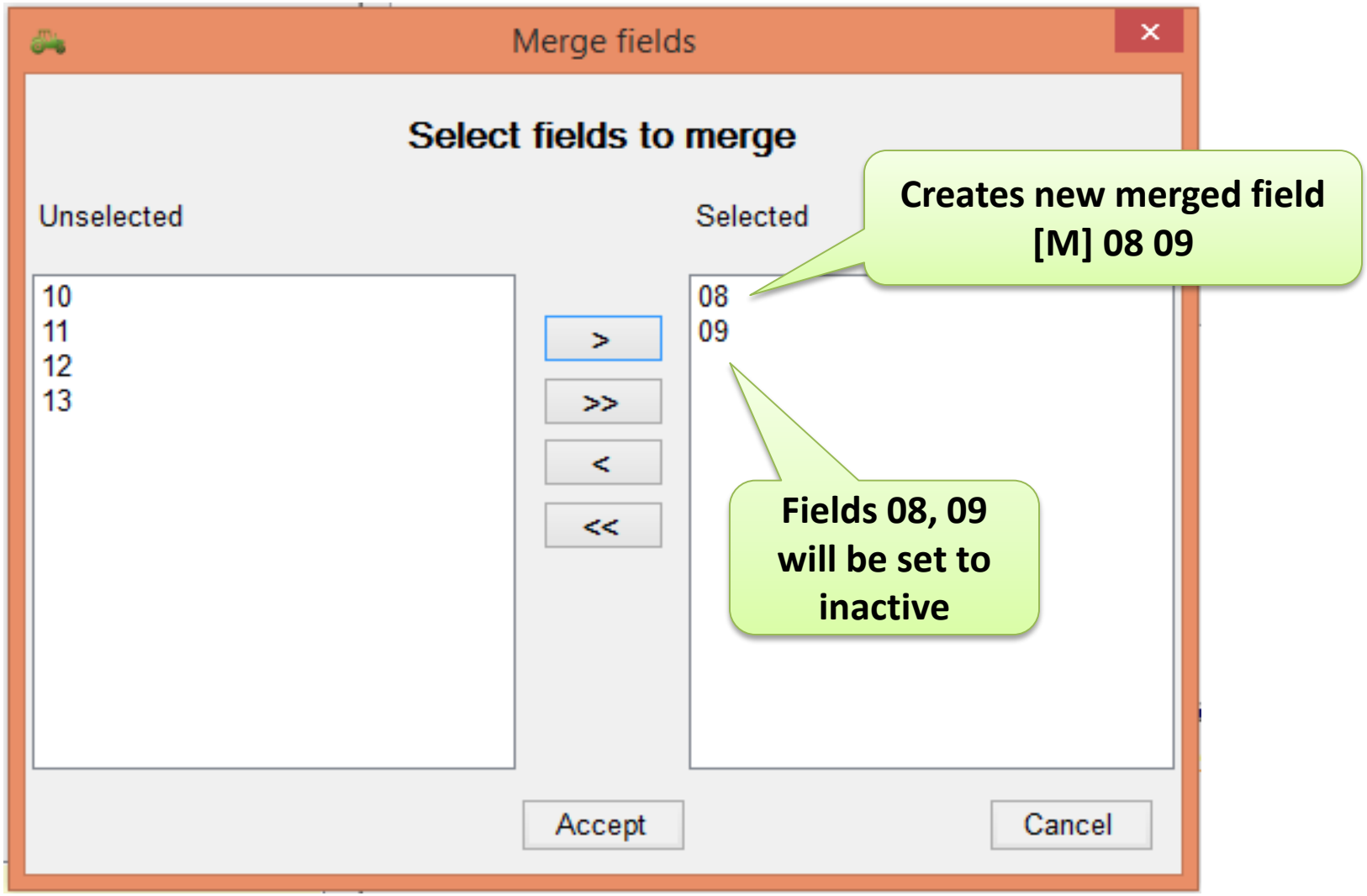
Export to a file to create a template for editing/entering your daily log applications

Export directly to the Daily log screen for editing.

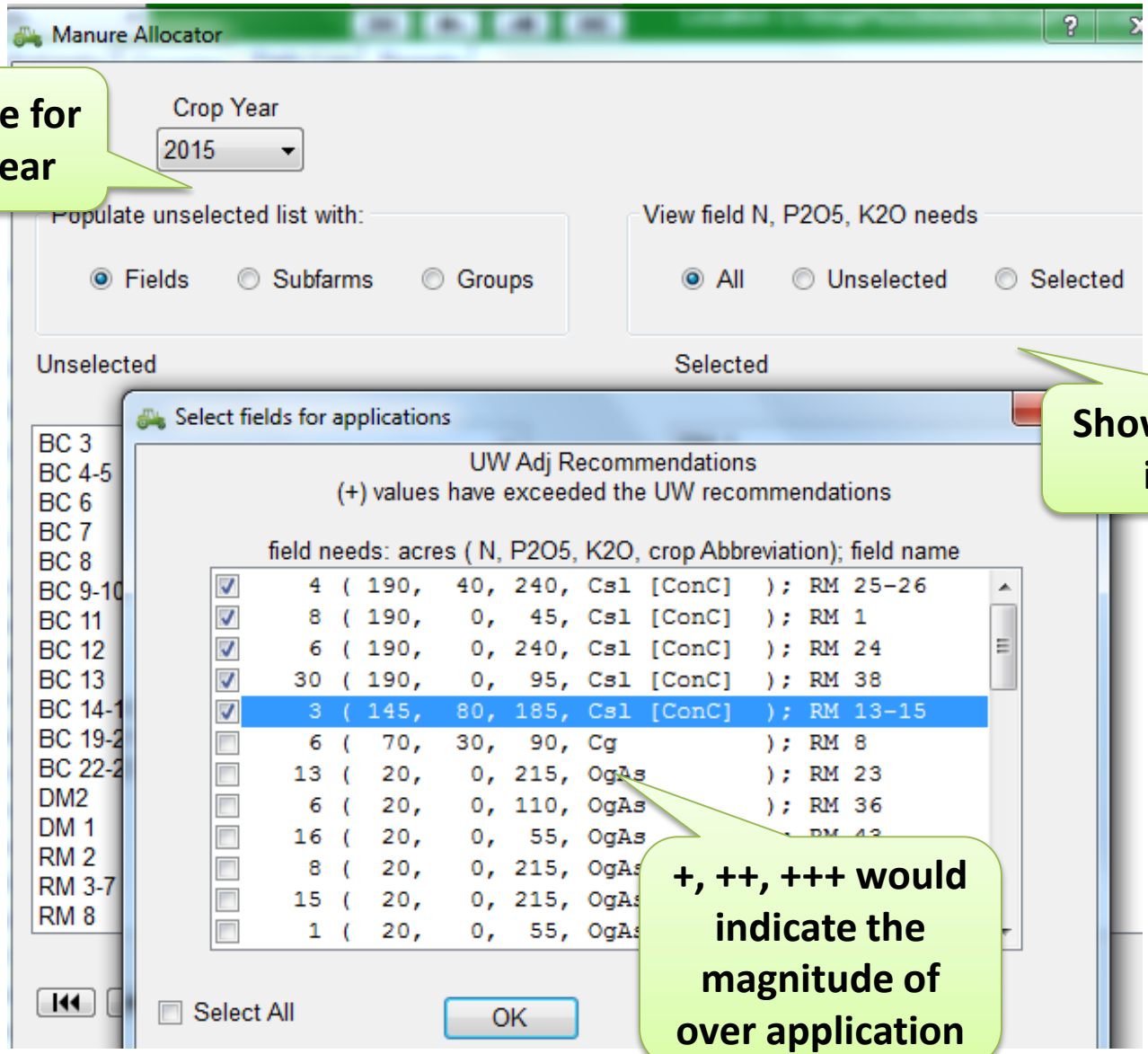
Export Soil Tests



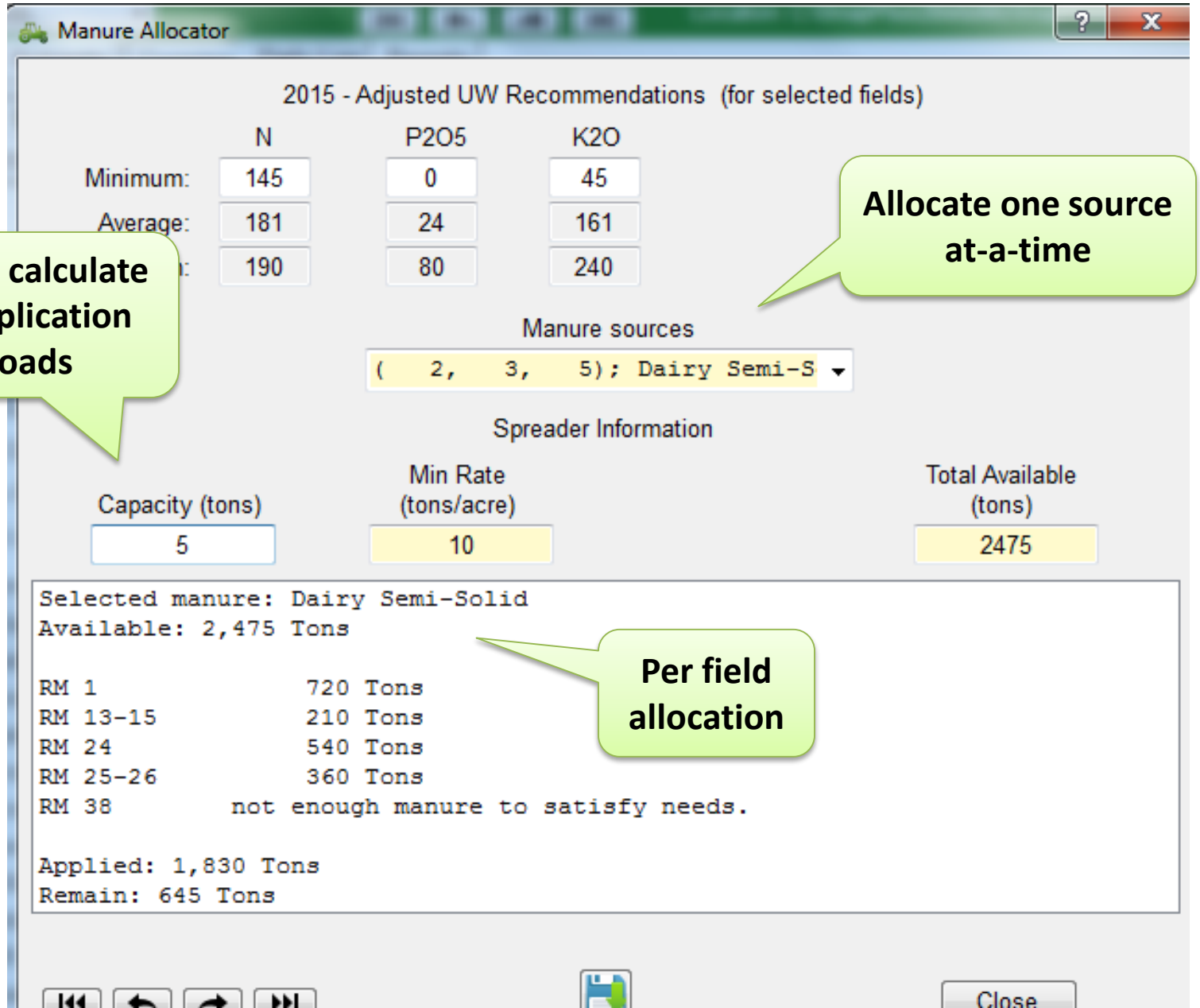
Merge Fields



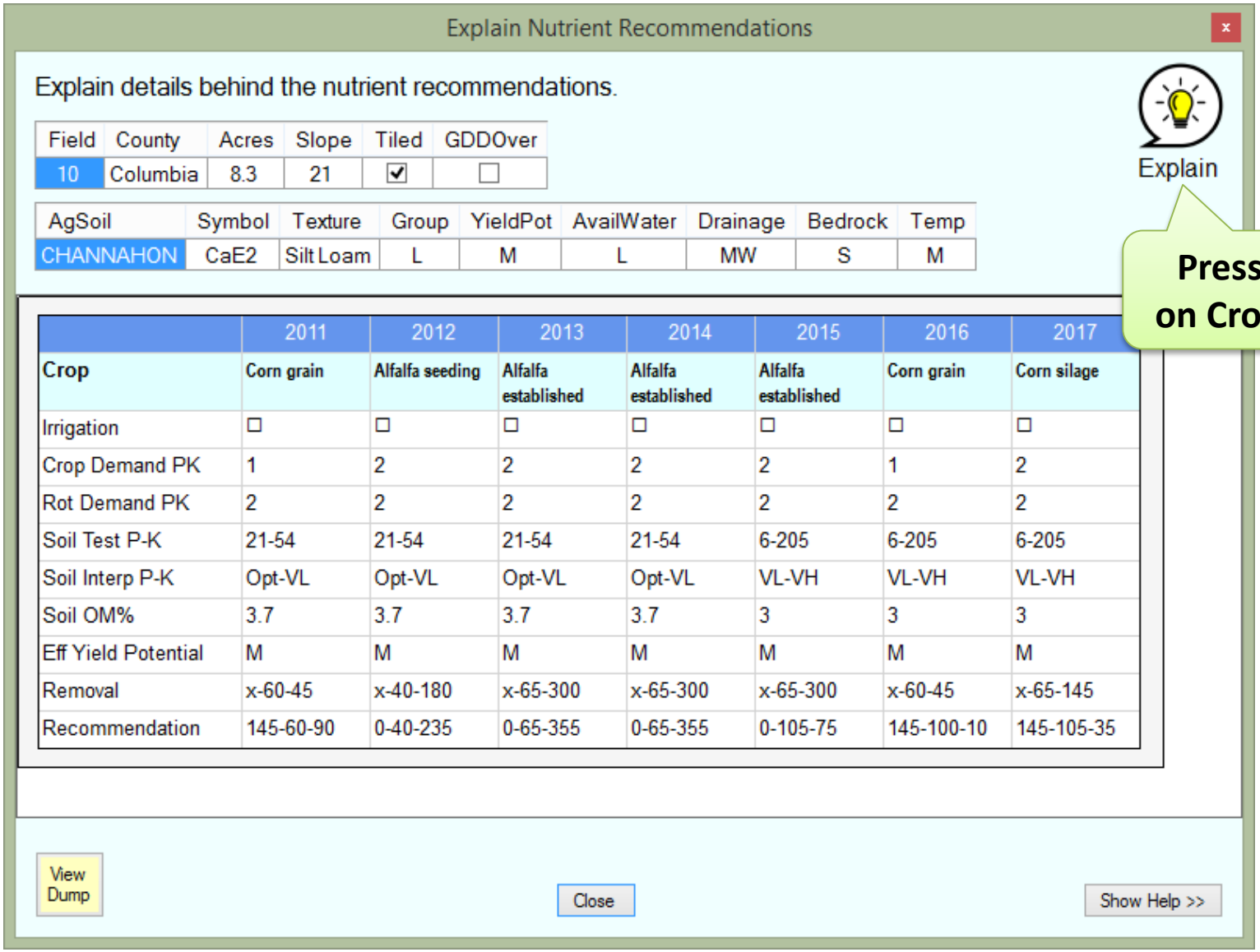
Manure Allocator



Manure Allocator



Explain Recs

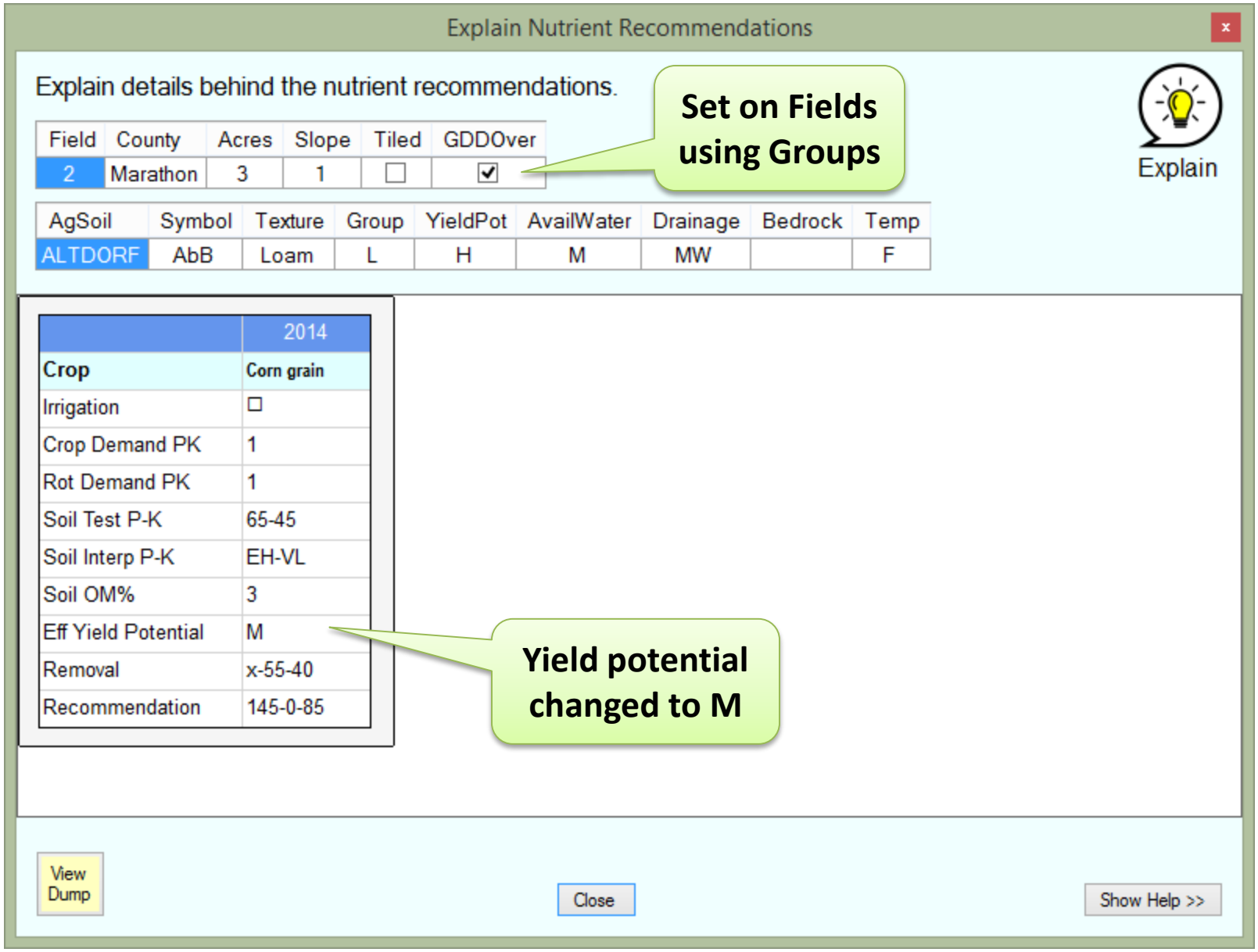


Field	County	Acres	Slope	Tiled	GDDOver
10	Columbia	8.3	21	☑	☐

AgSoil	Symbol	Texture	Group	YieldPot	AvailWater	Drainage	Bedrock	Temp
CHANNAHON	CaE2	Silt Loam	L	M	L	MW	S	M

	2011	2012	2013	2014	2015	2016	2017
Crop	**Corn grain**	**Alfalfa seeding**	**Alfalfa established**	**Alfalfa established**	**Alfalfa established**	**Corn grain**	**Corn silage**
Irrigation	☐	☐	☐	☐	☐	☐	☐
Crop Demand PK	1	2	2	2	2	1	2
Rot Demand PK	2	2	2	2	2	2	2
Soil Test P-K	21-54	21-54	21-54	21-54	6-205	6-205	6-205
Soil Interp P-K	Opt-VL	Opt-VL	Opt-VL	Opt-VL	VL-VH	VL-VH	VL-VH
Soil OM%	3.7	3.7	3.7	3.7	3	3	3
Eff Yield Potential	M	M	M	M	M	M	M
Removal	x-60-45	x-40-180	x-65-300	x-65-300	x-65-300	x-60-45	x-65-145
Recommendation	145-60-90	0-40-235	0-65-355	0-65-355	0-105-75	145-100-10	145-105-35

GDD Override

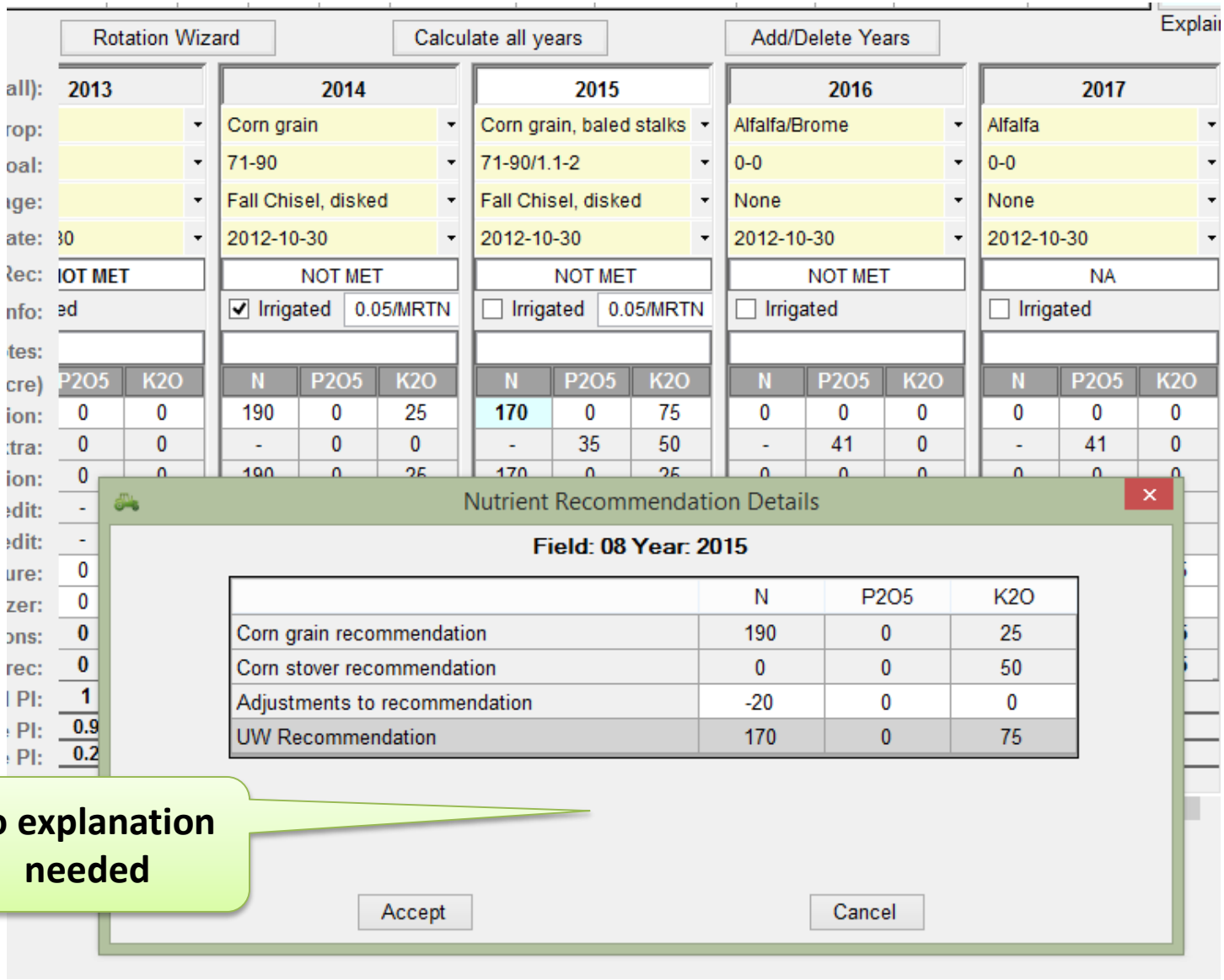


Field	County	Acres	Slope	Tiled	GDDOver
2	Marathon	3	1	☐	☑

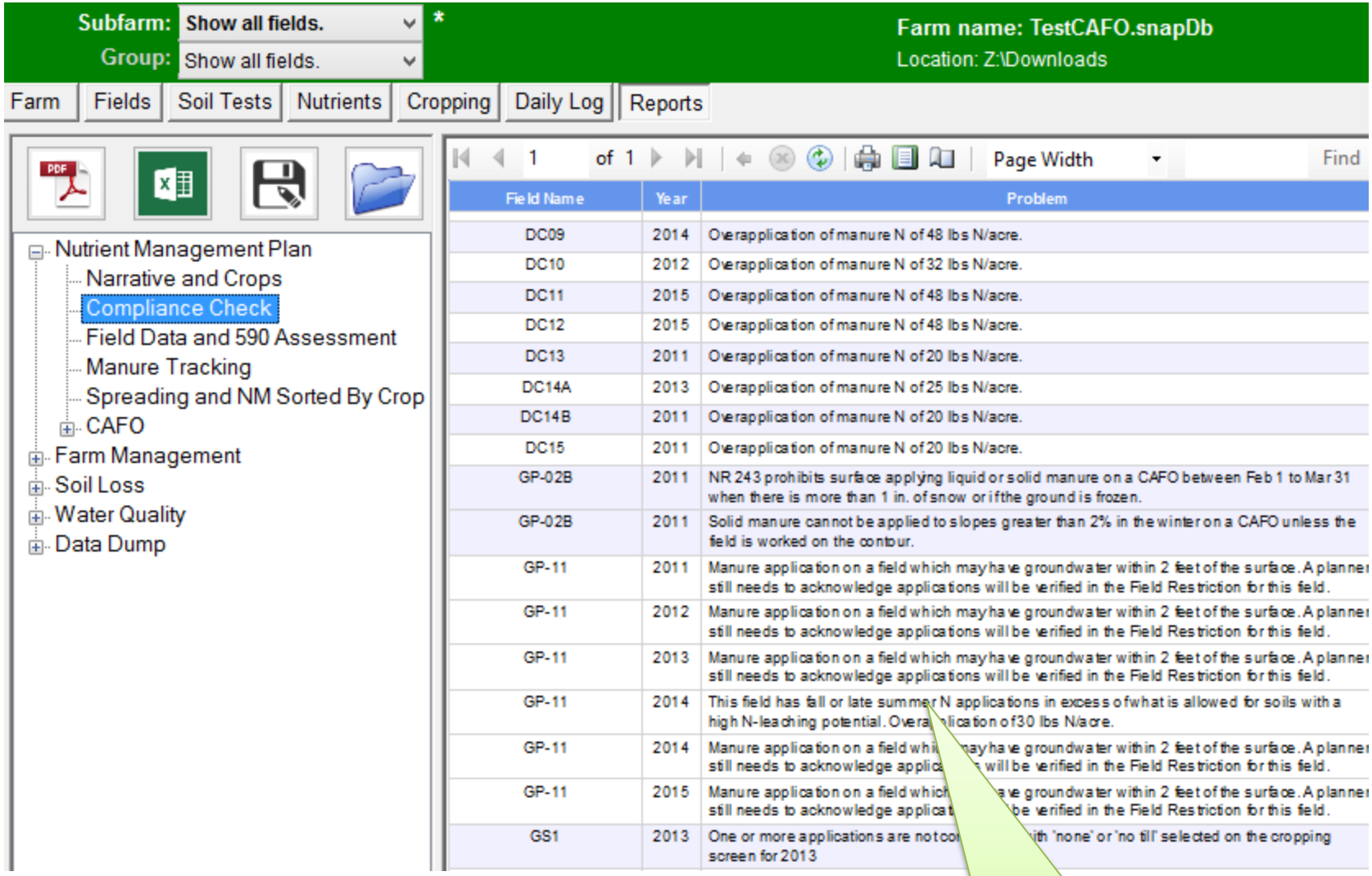
AgSoil	Symbol	Texture	Group	YieldPot	AvailWater	Drainage	Bedrock	Temp
ALTDORF	AbB	Loam	L	H	M	MW		F

	2014
Crop	**Corn grain**
Irrigation	☐
Crop Demand PK	1
Rot Demand PK	1
Soil Test P-K	65-45
Soil Interp P-K	EH-VL
Soil OM%	3
Eff Yield Potential	M
Removal	x-55-40
Recommendation	145-0-85

Negative Rec Adjustment



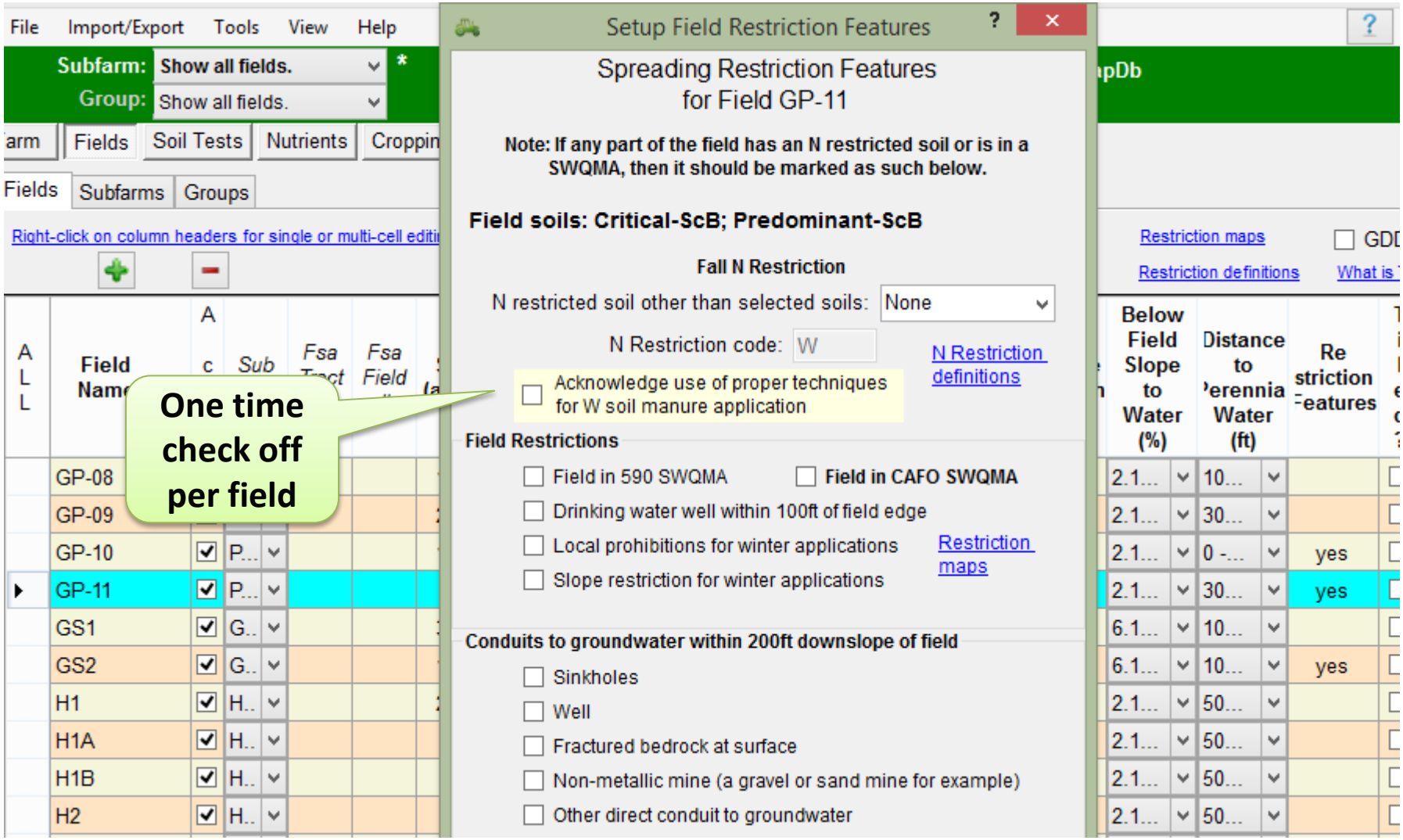
CAFO W soil restriction



Field Name	Year	Problem
DC09	2014	Overapplication of manure N of 48 lbs N/acre.
DC10	2012	Overapplication of manure N of 32 lbs N/acre.
DC11	2015	Overapplication of manure N of 48 lbs N/acre.
DC12	2015	Overapplication of manure N of 48 lbs N/acre.
DC13	2011	Overapplication of manure N of 20 lbs N/acre.
DC14A	2013	Overapplication of manure N of 25 lbs N/acre.
DC14B	2011	Overapplication of manure N of 20 lbs N/acre.
DC15	2011	Overapplication of manure N of 20 lbs N/acre.
GP-02B	2011	NR 243 prohibits surface applying liquid or solid manure on a CAFO between Feb 1 to Mar 31 when there is more than 1 in. of snow or if the ground is frozen.
GP-02B	2011	Solid manure cannot be applied to slopes greater than 2% in the winter on a CAFO unless the field is worked on the contour.
GP-11	2011	Manure application on a field which may have groundwater within 2 feet of the surface. A planner still needs to acknowledge applications will be verified in the Field Restriction for this field.
GP-11	2012	Manure application on a field which may have groundwater within 2 feet of the surface. A planner still needs to acknowledge applications will be verified in the Field Restriction for this field.
GP-11	2013	Manure application on a field which may have groundwater within 2 feet of the surface. A planner still needs to acknowledge applications will be verified in the Field Restriction for this field.
GP-11	2014	This field has fall or late summer N applications in excess of what is allowed for soils with a high N-leaching potential. Overa plication of 30 lbs N/acre.
GP-11	2014	Manure application on a field whi may have groundwater within 2 feet of the surface. A planner still needs to acknowledge applica will be verified in the Field Restriction for this field.
GP-11	2015	Manure application on a field which ve groundwater within 2 feet of the surface. A planner still needs to acknowledge applicat be verified in the Field Restriction for this field.
GS1	2013	One or more applications are not coo ith 'none' or 'no till' selected on the cropping screen for 2013

Every year has W restriction message

CAFO W soil acknowledgement



CAFO Emergency Winter Spreading

SnapPlus CAFO Emergency Spreading Suitability Report

Crop Year	2014
Reported For	Troubled 20130429
Printed	2014-08-21
Plan Completion/Update Date	2013-04-11
SnapPlus Version 14.0 built on 2014-08-04 13:32	
Z:\Downloads\Testing Database.snapDb	

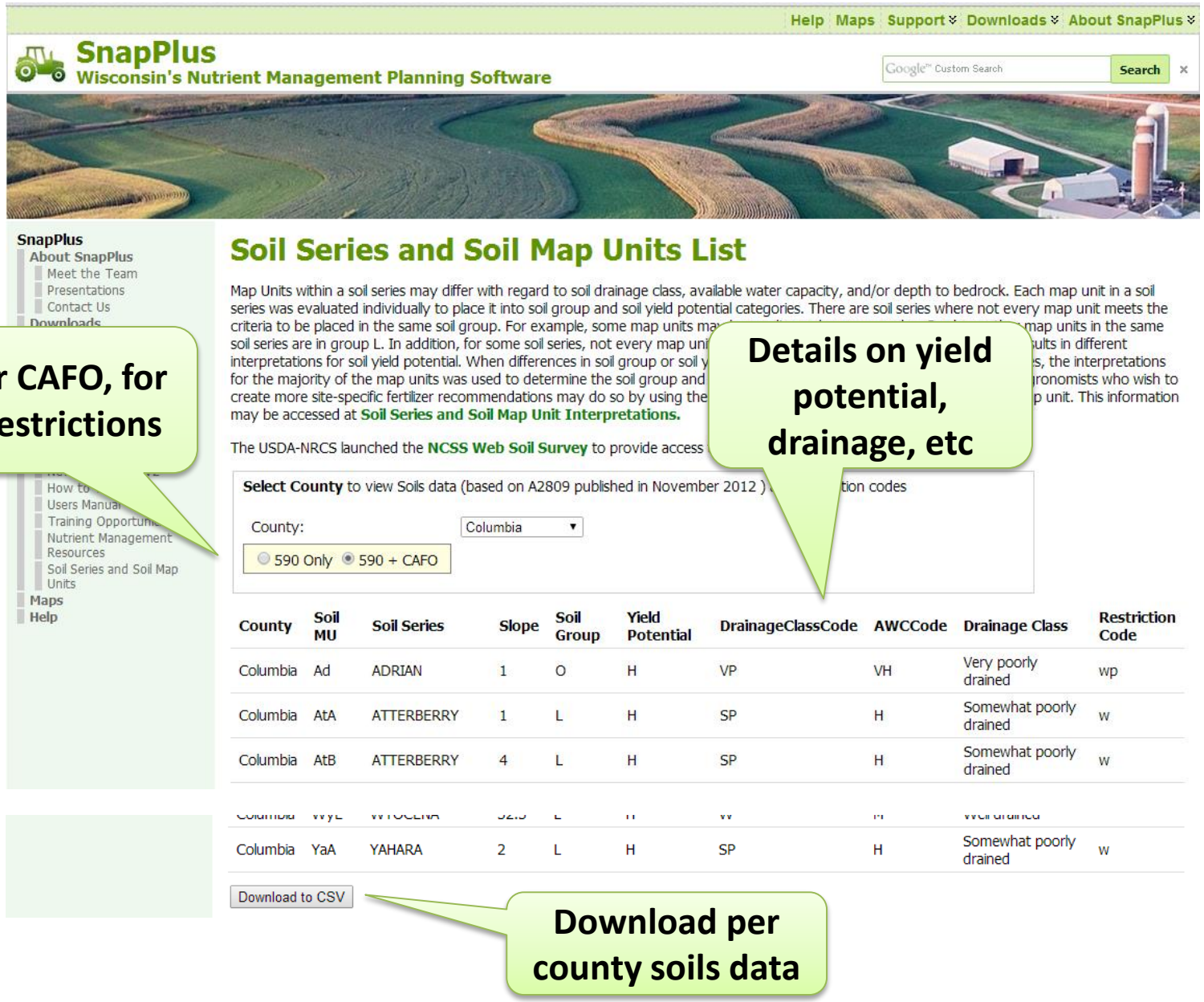
Prepared for:
Troubled 20130429
attn: Dub Trouble
Somewhere
2325 Somewhere Hwy
Somewhere, 00000-0000

This report displays the maximum rate allowed and a simulated winter acute loss index value when liquid manure is applied for each field in a WPDES permitted farm in a crop year. For fields with 0 - 2% slopes, the simulated value is calculated with an application volume of 7000 gallons per acre per winter season and for fields with 2-6% slopes, the application rate used is 3500 gallons per acre.

Crop Year	Farm Name	Subfarm Name	Field Name	Source Name	Max Rate	Acute Winter PI with Maximum Rate
2014	Troubled 20130429		1	Dairy Liquid	7000	1.9
2014	Troubled 20130429		2	Dairy Liquid	App Not Allowed	Not Suitable
2014	Troubled 20130429		5	Dairy Liquid	3500	1.5
2014	Troubled 20130429		6	Dairy Liquid	App Not Allowed	Not Suitable
2014	Troubled 20130429		7	Dairy Liquid	3500	0.3
2014	Troubled 20130429		8	Dairy Liquid	7000	3.0
2014	Troubled 20130429		9	Dairy Liquid	7000	0.3
2014	Troubled 20130429		Fall N Restrictions Fertilizer	Dairy Liquid	7000	1.6

Max winter rate

Soils details

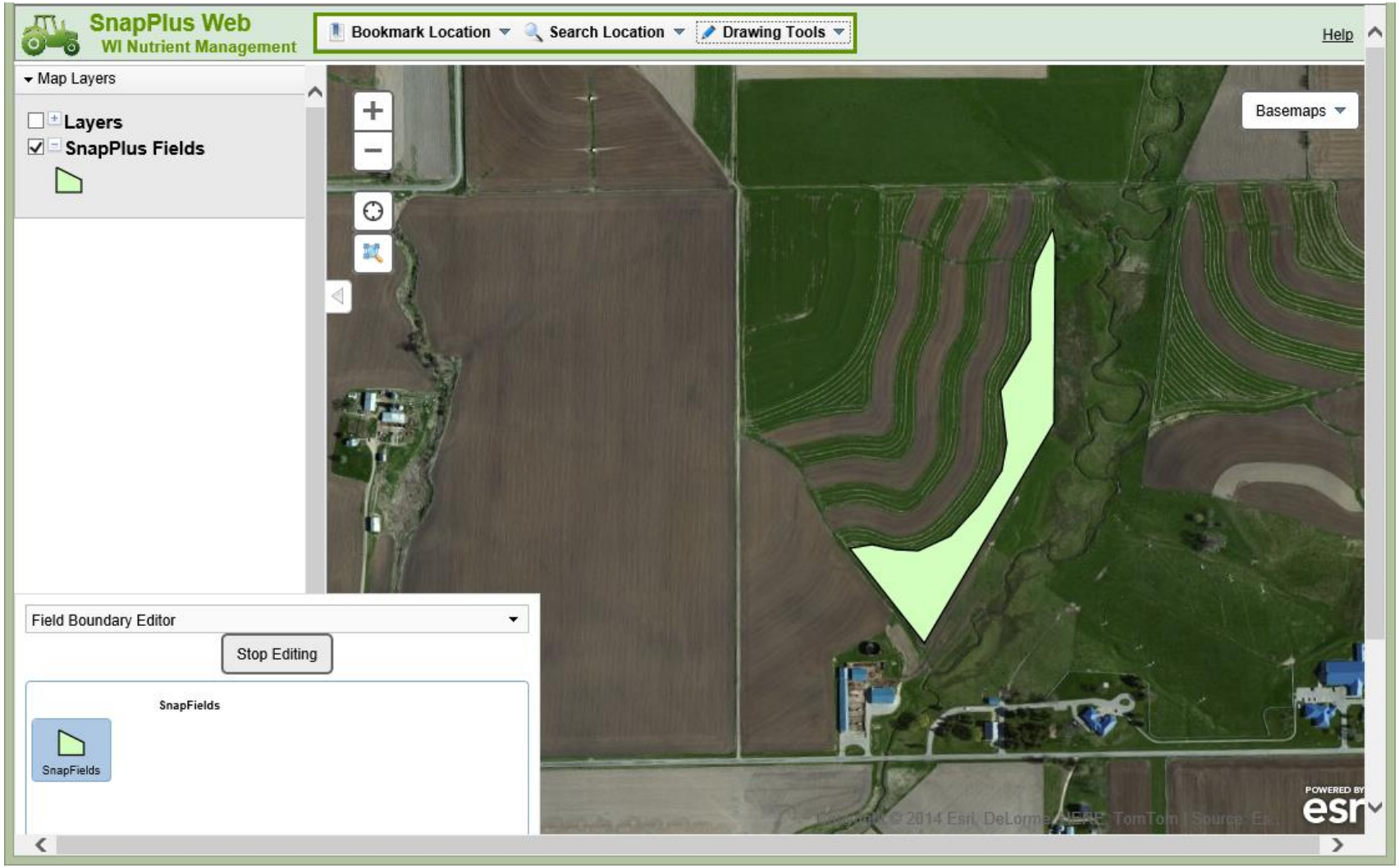


GIS: 14.x release

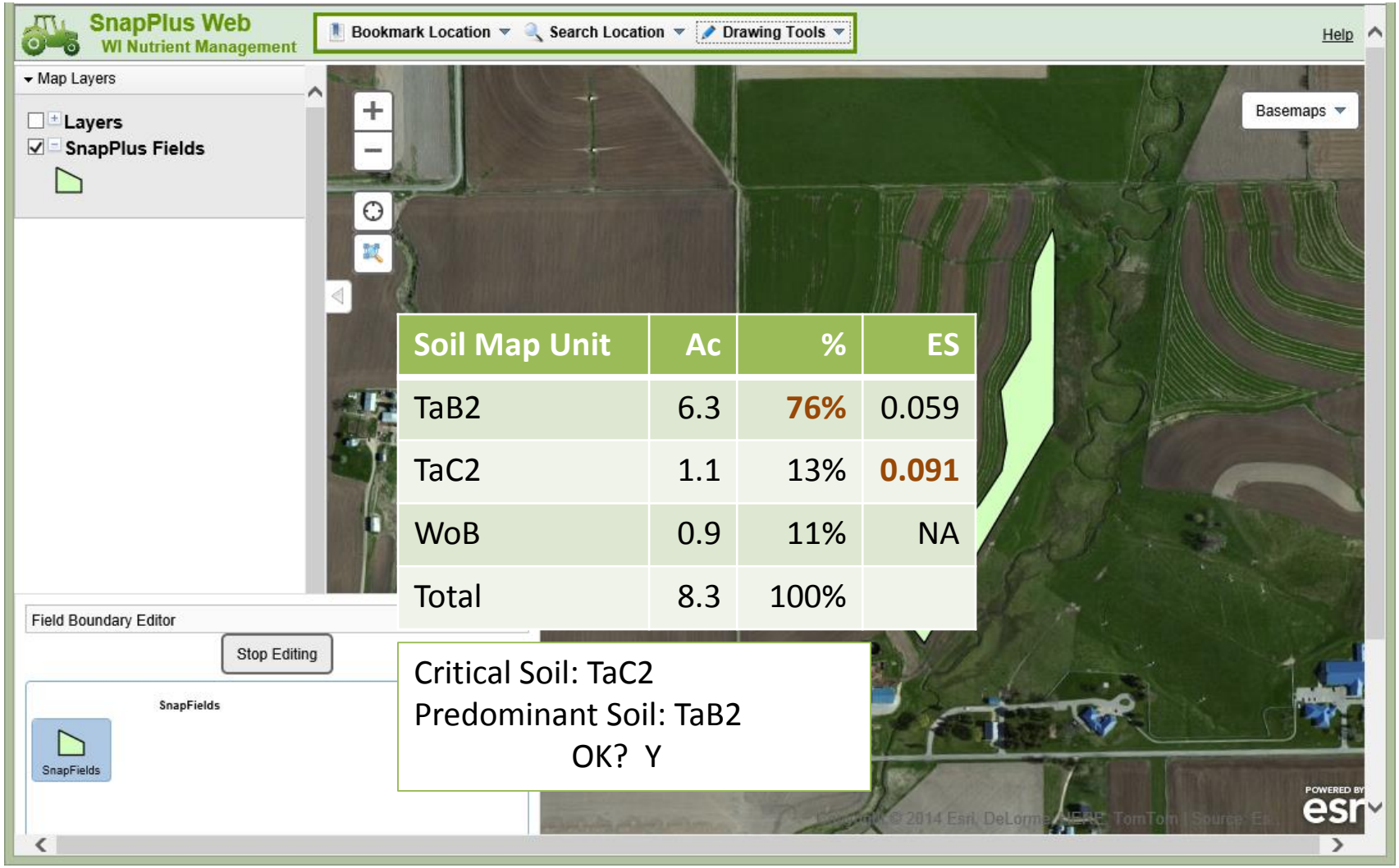
- Field boundaries, import shape files, soil determination
- Field restrictions
- Export map data to PDF, shape files, Excel
- Reports as Maps
- Internet connection + Windows
- Uses ArcGIS Server

Target date: *January 2015*

Field boundaries

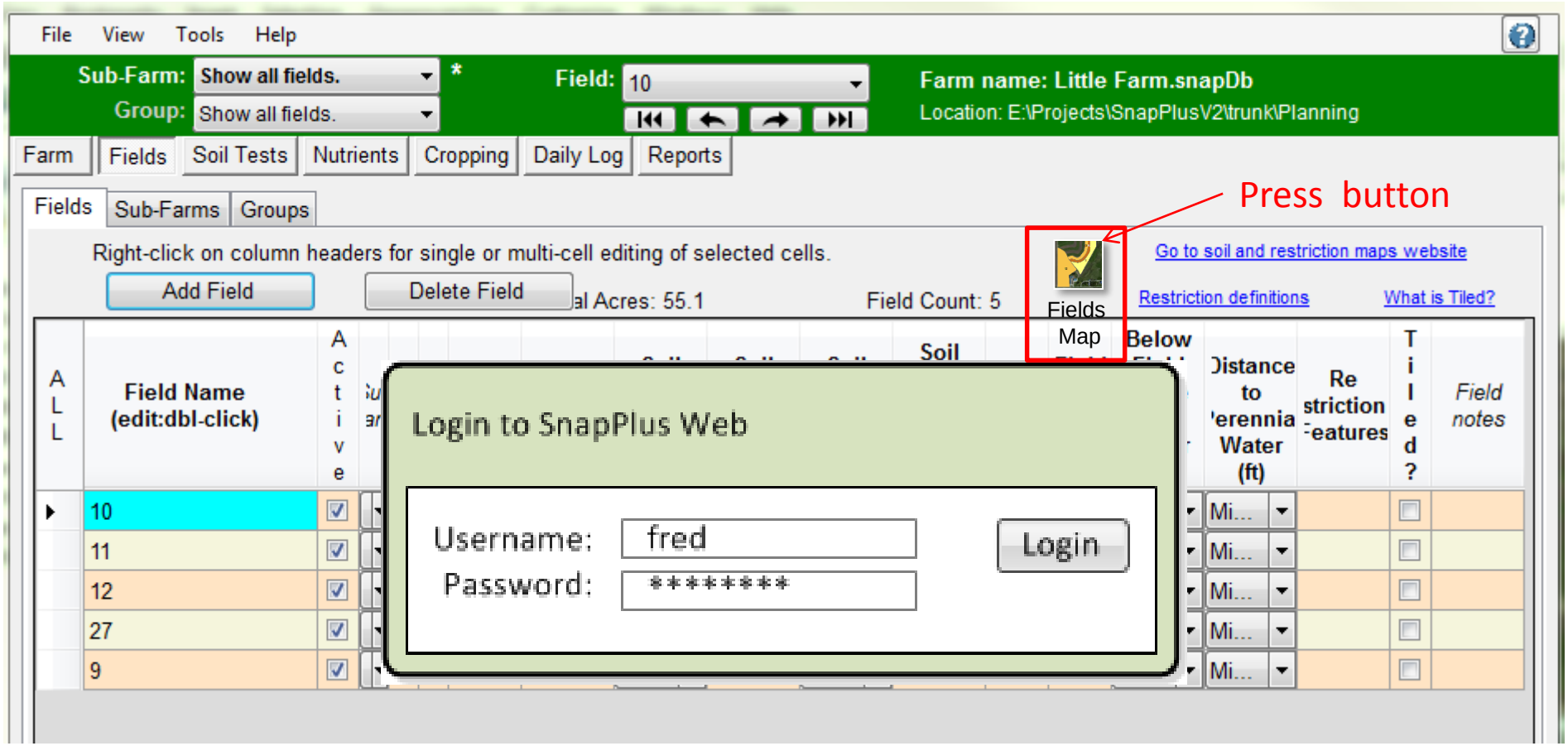


Geospatially determine soils



Soil Map Unit	Ac	%	ES
TaB2	6.3	**76%**	0.059
TaC2	1.1	13%	**0.091**
WoB	0.9	11%	NA
Total	8.3	100%	

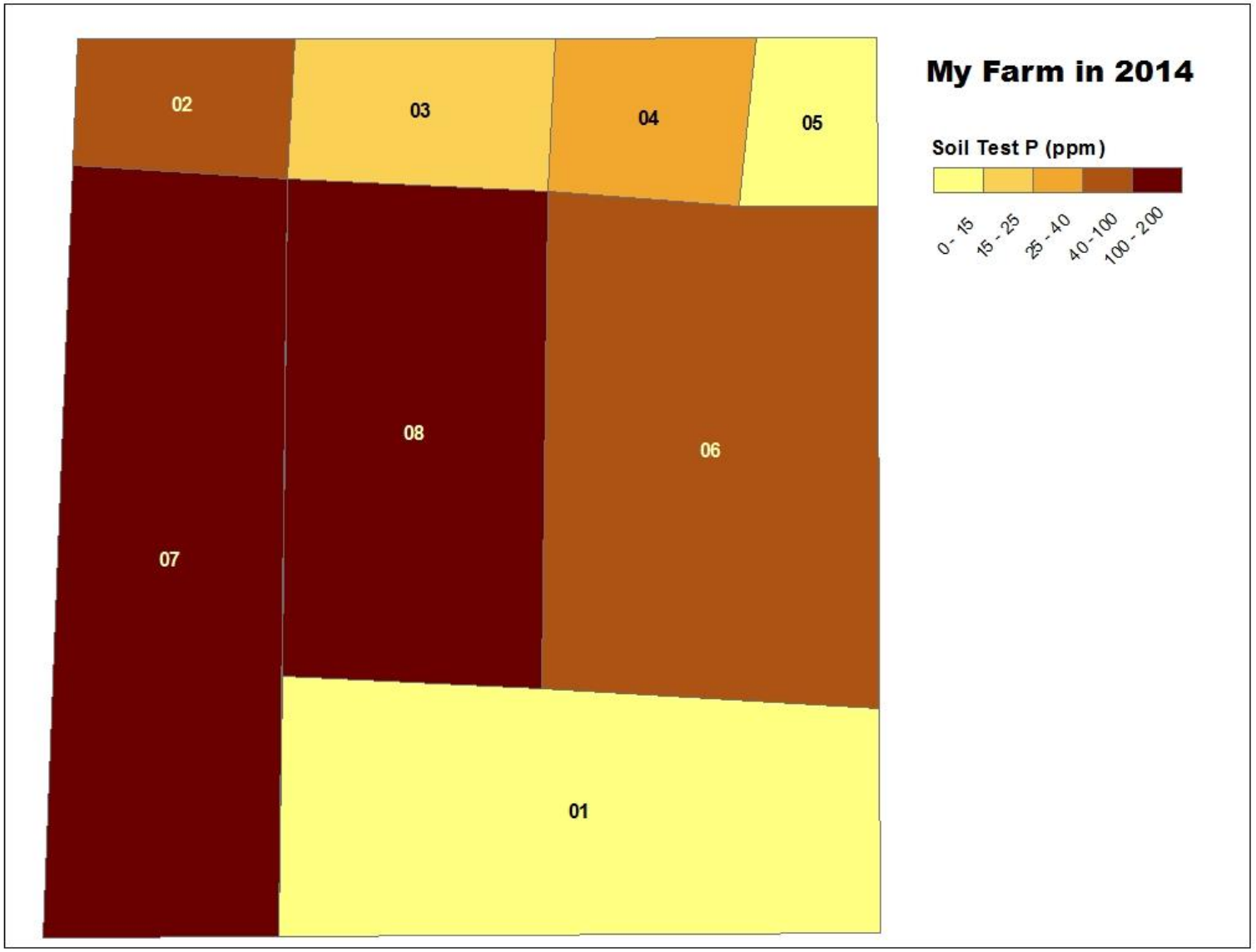
Security on the Web



Maps as Reports

- ❑ Soil Test P
- ❑ Spreading plan
- ❑ P-K balance year by year
- ❑ N-P-K over/under year by year
- ❑ Crops year by year
- ❑ Show compliance

Soil Test P


My Farm in 2014
Soil Test P (ppm)
0 - 15
15 - 25
25 - 40
40 - 100
100 - 200
02
03
04
05
08
06
07
01

P205 Balance year by year